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(54) Title: METHODS FOR EVALUATING GENETIC SUSCEPTIBILITY AND THERAPY FOR CHRONIC INFLAMMATORY DISEASES

(57) Abstract: The invention discloses a knockout mouse that is homozygous for a RUNX3 null allele, as a novel model for chronic inflammatory disease. The present invention provides methods for treating T cell-related inflammatory conditions by cell therapy, gene therapy or antisense for up regulating or down regulating RUNX3. The invention further relates to methods of diagnosing and assessing predisposition to chronic inflammatory diseases. The present invention further provides methods for testing agents for effectiveness in treating and/or preventing diseases associated with chronic inflammatory or autoimmune conditions.

INTERNATIONAL SEARCH REPORT

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PCT/IL03/01115 CLASSIFICATION OF SUBJECT MATTER IPC(7) C12N 15/11; C07H 21/04; G01N 33/00; A01K 67/00 536/23.1; 435, 325, 7.1; 800/8, 3 US CL According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED B. Minimum documentation scarched (classification system followed by classification symbols) U.S. : 536/23.1; 435, 325, 7.1; 800/8, 3 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. BANGSOW et al. The RUNKS gene-sequence, structure and regulated expression. Gene. 1-48 November 2001, Vol. 279, pages 221-222, see entire document Y TANIUCHI et al. Differential Requirements for RUNX proteins in CD4 Repression and 1-48 Epigenestic Silencing during T Lymphocyte Development. Cell. November 2002, Vol. 111. pages 621-633. See entire document. Å LEVANON et al. RUNX3 knockouts and stomach concer, EMBO. June 2003, Vol. 4, pages 1-48 A ITO ct al. RUNX3 transcription factors as key targets of TGF-beta superfamily signaling. 1-48 Curr. Opin. Genet. Dev. February 2003, Vol. 13, pages 43-47, see ontire document FAINARU et al. RUNKS regulates mouse TGF-beta-mediated dendritic cell function and its Α 1-48 abscence results in airway inflammation. EMBO. February 2004, Vol. 23, pages 969-979 Further documents are listed in the continuation of Box C. See patent family annex. Special estagories of cited documents inter document published ofter the international filling date or priority days and not in conflict with the application but ofted to understand the principle or theory underlying the invention ٠٨document defining the general state of the set which is not considered to be of particular relevances document of particular relevance; the claimed invarilan exceet be considered nevel or course by considered to involve an invarile step when the document is taken alons **'X'** -Bordier application or patent published on or after the international filing date document which may throw doubts on priority claim(s) or which is clad to establish the publication due of mother clades or other special power (m document at particular relevance; the claimed invertion control to complete to be the many the stock of the sto document referring to an oral dissimure, use, exhibition or offer month to a person skilled in the set document published prior to the international filing date but later than the priority date claimed "Æ" decement member of the same patent firely Date of the actual completion of the international search Date of mailing of the international search report 17 OCT 2005 29 August 2005 (29.08,2005) Name and mailing address of the ISA/US Authorized afficer Mall Stop PCT, Abrai ISA/US
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